

MACDONALD COLLEGE JOURNAL



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MAY
1947

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SINCE
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What's Behind the Smoke Screen?

The public may well be confused by all the smoke and dust that is being stirred up over our national system of broadcasting. It is a great pity that an issue so important to the people of Canada should be clouded by false issues — for the political issue that some seek to raise, and the issue of public vs. private ownership, are alike false.

The legislation under which the Canadian Broadcasting Corporation operates was the result of a careful and exhaustive study made by a particularly able and unpartisan Royal Commission, and was passed without any important opposition.

The chairman of this commission was a banker of national repute, and a firm advocate of what has come to be known as "Free Enterprise." He and his fellow commissioners sought to establish a broadcasting system that would be truly Canadian, free from the danger of falling into the hands of the big U.S. chains, and capable of continuing to meet "Canadian needs, desires, tastes and national aspirations."

They rejected the idea of a government monopoly as exemplified by the B.B.C. They rejected with equal force the American system of entirely private stations subject only to the shadowy regulation of the Federal Communications Commission. They believed that Canada would best be served by a combination of the two systems, using the best of each and eliminating their weaknesses.

It is clear that, at least when the C.B.C. was established, neither party wanted to see it become a political battlefield. Set up under a Conservative regime, it has been continued by the Liberal Government with only minor changes in its organization.

But the manner in which the current issues have been raised raises a question as to what is behind this dark cloud of criticism. An editorial writer on one of our great daily papers states that a "private radio lobby" has been particularly active for the past two years. We have no personal knowledge of any such lobby; but it does seem doubtful if all the smoke is just the result of spontaneous combustion. In any case, the smoke is there; and if Canadian radio is to maintain the values that the Royal Commission sought to preserve, everyone who has the public interest at heart must be keenly alert.

The Journal holds no brief for the C.B.C. No doubt its services could be improved by better showmanship and more support for informational programs. This might require some rearrangement of expenditures and shifts in staff. But we believe that this could be handled without any increased load on the already overburdened taxpayer.

The Journal is concerned only that an invaluable service to farmers should be interfered with on the basis of false issues. Constructive criticism is always necessary. But we do not feel that criticism is constructive when it advocates policies that would destroy the Canadian character of our programs and the special benefits we receive through ownership of a national system strongly reinforced by private stations. Such criticism will eventually succeed in undermining the chief values of our present broadcasting set-up, unless those who recognize its virtues rally to its support.

Farmers have a particular stake in this matter. Because of the scattered nature of our farm population, it probably derives more benefit from radio than any other group. Farmers have shown their appreciation by co-operating actively in such programs as Farm Radio Forum, which has provided a means of concerted action for our farm people that has made considerable impact on even our most remote settlements.

Possibly such results could be effected under another system. But the fact is that no other system has so far produced them. And a study of the U.S. system readily reveals the reasons. Anyone who thinks that it is better than ours has only to read the reports of the Federal Communications Commission to be disabused of any such idea.

Farm groups have repeatedly expressed their appreciation of the services rendered by the C.B.C. It seems that it is now, more necessary than ever before for them to guard against any action that would work against their needs and wishes.

Our Cover Picture

The members of the Howick, P.Q. Calf Club feature our cover this month. The photo was taken in 1945 by Mr. A. E. McLaurin.

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How to Make More of Your Hay Crop

by A. A. Hanson

HAY is extremely important to all farmers with livestock to feed. It is particularly important in Quebec, where the value of the hay crop is almost equal to that of all other field crops combined.

Weather conditions dominate the haying scene, wield- ing a big influence on both yield and quality. Unfortunately there's not much we can do about the weather, except to use it as a topic of conversation. But there are a number of other things we can do something about, to increase our chances of getting a good hay crop. They are the fertility of the soil, the hay mixtures used, the way they are planted, and the time the crop is har- vested.

Whether or not a meadow will produce a vigorous crop is largely dependent on soil fertility. Under humid conditions very acid soils and a low supply of phosphorus are the rule, while on the lighter soils potassium is very often deficient. In order to secure thrifty legume stands, soil acidity should be corrected by liming and, where necessary, an ample supply of minerals ensured through the use of superphosphate and potash.

Legumes justify this special attention, not only for their high quality hay but also because they are by far our greatest and cheapest source of nitrogen. Under good soil conditions, the legumes grow better and fix larger amounts of atmospheric nitrogen; and field observations indicate that they are in a much better position to resist winter injury. Alfalfa specially demands a fertile soil. In addition, provision should always be made to inoculate alfalfa seed when it is first sown, or where the field in question has not been seeded to alfalfa for some time.

The small seeded grasses and legumes require a care- fully prepared seedbed that has been well firmed be- fore seeding. These small seeds have insufficient food reserves to emerge if they are planted too deeply, and shallow covering ($\frac{1}{4}$ to $\frac{1}{2}$ inch) is essential. The larger seeds of brome grass are an exception and they are generally seeded through the grain box mixed with the grain. When following this practice, care should be taken to see that the brome seeds are not planted more than an inch and a half deep.

New seedings may produce considerable growth after the nurse crop has been removed and, while they may be effectively used as pasture, over-stocking and severe grazing should be avoided. It is advisable to keep stock off the field during the critical month of September when the legumes are building up their food reserves for the coming winter.

Hay quality is largely governed by the time of cut- ting. Delayed harvesting results in a serious loss in feeding value, although the yield may appear to be

How good is your hay? Do you get big yields of nice juicy stuff that speeds your cows' milk flow, or does it look and taste like standing straw? Here are some good hints on putting feed value into it, and keeping it juicy.

satisfactory. On the other hand, cutting when the crop is still very immature produces a high quality product, but the weather is unpredictable at this time and yield is invariably sacrificed.

While the proper stage of cutting varies for different hay plants, the highest yield of digestible nutrients per acre is generally obtained between the early and full bloom stages. Large acreages make it necessary to start haying early, so that as much of the crop as possible is cut at the right time.

The present price of red clover seed certainly war- rants a statement on the management of fields for seed production. Evidence obtained over a six-year period at Macdonald College suggests that red clover seed yields are higher when the first cut is removed about the middle of June. The results for 1946 are summarized below:—

Red Clover Seed Production, 1946

Treatment	Pounds of Seed per Acre
Uncut	72.4
Cut June 1	128.6
" " 8	178.9
" " 15	162.4
" " 22	163.0
" " 29	105.0

Fodder production attains its greatest efficiency when regarded as a unit consisting of hay, pasture and silage. The difficulties encountered with curing early cut hay (especially where red clover seed production is anti- cipated) can be overcome by making grass silage. Also where fields seeded down to the larger types of grasses and legumes are being used as pasture, it is often neces- sary to take a cut for hay or silage if a field appears likely to get ahead of the stock and become too mature and strawy.



This heavy cut of timothy hay is not a matter of chance, but has been made possible through careful planning.

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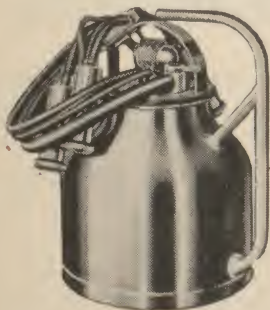
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Farm Picnics Smarten Up

by John Snedden

THE season of fairs, picnics and field days will soon be here again. Then farm families will take all the holidays most of them get, to join friends and neighbours in having a good time.

But farmers' ideas of a good time seem to have changed quite a lot from the days when most of us were youngsters—or else they've discovered how to have a better time. Remember how we used to go to picnics with our parents, feeling awkward and shy in our Sunday best? And how, when we were just beginning to have a wonderful time, our parents would decide to go home and drag us away from all the fun? This seemed rather unreasonable to us as youngsters. But when we grew up we began to understand why our parents so soon tired of picnics. There was just nothing on the program for adults.

Certainly most farmers enjoy talking to neighbours and watching their youngsters race, and neighbourhood teams play ball. But interesting topics of conversation run out, races are finished and even ball games sometimes get monotonous.

Some considerate soul must have thought of this, and decided it would be a good idea to include something on the program for adults. At first it was often a talk by some public figure. That helped to hold the older people, and the younger generation could enjoy themselves a little longer. Then someone had the bright idea that, while so many farmers were together with nothing much to do, it would be a good chance to bring in speakers on agricultural topics. The response was good, and more children got taken to the next picnic by parents who wanted to hear the speakers.

But some people are never satisfied. They thought speeches were all very well, but demonstrations would be better. So the next year someone suggested going to a nearby farm that had test plots on it, where farmers could see results for themselves. And then someone thought it would be a good idea to organize a special trip to an agricultural institution, where they could see a lot more work under way.

So the picnic gradually changed to a field day with a picnic lunch. Now the farm field day has become a national institution, with tens of thousands of farmers going scores of miles for their yearly stock-taking of agricultural progress. Why do they go? Because they enjoy it, not just for the day, but because of what they take home with them in the form of new ideas.

This summer more farmers will go to field days than ever before. They'll get up early and whip through

the chores so they'll have a little time to relax and look over the grounds before noon. Then they'll spread a picnic lunch on the shady lawn and pack away a surprising amount of sandwiches, salads and cake.

Then will come the highlight of the day — the tours to see what new crops look like, and how old crops respond to different treatments, to see high-producing livestock and poultry, and to catch up generally with the latest developments in farming. The women will linger over the flowers and the vegetable gardens and poultry. And the younger children will find lots of others to play with on the broad lawns. But before they're much older they'll enjoy going the rounds, and start asking questions almost as good as their elders'.

Yes, a well-organized field day at a live institution offers a pleasant outing for the whole family, and a chance to learn a lot of things that can be put to work back home — things that will lighten the work, increase returns and make the farm a better place to live. When the program ends and people start back for their cars, everyone is sorry that the day has passed so quickly, and many are already looking forward to the next field day.

Yes, things have changed a lot since we were youngsters. And in this case they've changed for the better.

Help Improve Farm Lands

Loans for the clearing and breaking of 52,000 acres of new land were made in Canada in 1946 by the branches of the chartered banks under the provisions of the Farm Improvement Loans Act. The loans were made to 1,008 farmers for a total of approximately \$550,000. Most of the loaning for this purpose was done in Western Canada, particularly in outlying areas such as the Peace River area. Much of the land that was cleared and newly broken was done by large power units especially designed for the handling of such work, operating on a custom basis.

It is anticipated by the officials administering the Farm Loans Improvement Act that loans for the clearing and breaking of land will be substantially increased for 1947 and that as a result a considerable amount of new land will be put into production. The banks, particularly in outlying areas are co-operating to the fullest extent with the Dominion Government in making the loans which are instrumental not only in furthering the progress of individual farmers, but in the development of the newer districts as a whole.



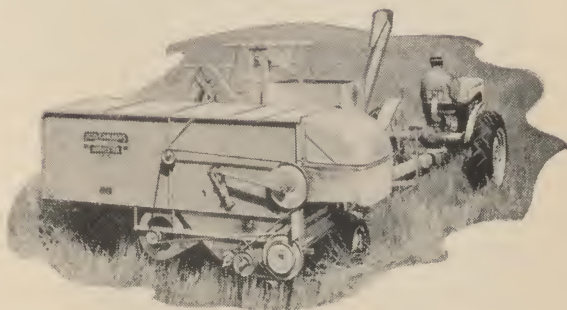
A MAN who works in the wheat all day knows what it takes to place bread on the tables of the world. After he has pitched bundles all afternoon, he comes in from the field, tired, hot and sweaty; he shakes the chaff out of his pants and digs beads out of the back of his neck. He sloshes his head in a pail of cold water, dries himself on the roller towel, looks out over his fields; and says to himself—"Well, the blankety-blank wheat's in for the year."
— from Farm Quarterly.

Photo Courtesy Farm Quarterly

UNLESS...

Most every farmer knows the above experience all too well. That is . . . unless he has discovered, as thousands have, that one man can harvest grain or seed crops sitting comfortably on the tractor seat, out of the chaff . . . that straw in the field can be handled with ordinary hay tools . . . that lodged, weedy crops can be saved where a binder would be helpless and tangled grain a nightmare.

A man cannot know the rich satisfaction of harvesting his choice of 100 crops at the peak of their quality, without waiting for custom rigs . . . he cannot put plump, stalk-ripened grain in the bin at the lowest cost . . . unless . . .



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Macdonald College Plans Farm Day

Macdonald College has just announced plans for a big Farm Day on Saturday, June 21, when it will hold open house for visitors. No efforts will be spared in making this a day to remember, state the College authorities.

In the past, small groups have visited Macdonald College every week throughout the summer. It has not always been possible to organize complete tours for these groups, especially when their visits conflicted with other activities. So this year the College appeals to everyone who can, to come on the one big Farm Day when its many lines of activity will be reviewed.

All the College departments, including handicrafts, will have exhibits to show the type of work they are doing; and tours will be organized to enable visitors to see the livestock, poultry, gardens, orchards and grain and pasture plots. A new Agricultural Engineering Building and a new Cold Storage Plant will be officially opened. Visitors will have a chance to inspect the latest in farm equipment, and to ask questions about it.

Dinner will be served in the dining room for the first 300 who apply for reservations in organized groups, through their secretaries. Applications for reservations should be made at once to Jos. Galway, Secretary of Farm Forums, Macdonald College, Que. Coffee will be provided for those who prefer to bring picnic lunches to eat on the College grounds.

The focal point for the day's activities will be the

front door of the Main Building where, between 9 and 10 a.m., Farm Forum secretaries will register their groups and pick up the dinner tickets they have reserved. The only organized activity in the forenoon will be the annual meeting of the Quebec Council of Farm Forums under the chairmanship of its president, Stuart Armstrong of Lachute.

Other visitors who arrive before lunch will be free to wander around the grounds, considered among the most beautiful in Canada, after they have registered and secured any dinner tickets they have reserved. Dinner will be served at 12:30 sharp, and the afternoon program will start at 1:30.

The first part of the program will consist of organized tours to the various departments, with loudspeakers set up so that everyone can follow what is going on. Visitors will be able to gain a lot of first-hand information on the latest developments in farming.

The Agricultural Engineering Building and the Cold Storage Plant will be officially opened at 4 p.m., and visitors will have a chance to inspect the equipment. That will end the Farm Day program; but those who bring a picnic supper can have it on the grounds.

Even people who have never visited Macdonald College will have no trouble in finding it. It is located on the Eastern outskirts of Ste. Anne de Bellevue, 24 miles west of Montreal, and backing on Highway No. 2.

The Fish-Loving God

When Nova Scotia was first colonized the settlers were rather amused by an Indian custom connected with corn planting. In each hill the Indians would drop a fish. Being tolerant people, the white men smiled good-naturedly at what they considered the natives' naive attempt to curry favor with some obscure god.

But the settlers soon discovered that the power whose help the Indians sought was not at all obscure. In fact it was very important; for when the colonists tried to

grow corn without observing the same rite, the crop was always poor.


So they tried the Indians' device, and found that it worked for them, too. Where the fish was put in with the corn, the stalks grew tall, and the ears large. Apparently the fish-loving god was not partial to any particular race, colour or creed.

Finally the settlers discovered the identity of the god that gave good corn in return for not-so-good fish. It was Fertility. And wherever he has been placated by offerings of fish, manure, or anything else he particularly needed, he has repaid the offerings many-fold.



Spuds Menaced by Ring Rot

Bacterial ring rot of potatoes is one of the important diseases affecting table potatoes in Canada. The only measure of control that can be recommended is the complete eradication of the disease on individual farms, states the Plant Pathology section of the Division of Botany, Dominion Department of Agriculture. After the disease has become established, its elimination can be accomplished only through regulations enacted and effectively enforced by each province.



New REWARDS *for Modern Harvest Hands*

What is a day's work at harvest time? If you want the answer in bushels or acres, the first thing you have to know is the type of machinery to be used. A day's work for the operator of a Case combine is a lot of harvested acres . . . many bushels in the bin. But the same man, picking up bundles by hand, won't advance the job very far in 12 or 14 hours of patient, drudging work.

So a day's work depends on what you work with . . . the type of equipment and its ability to multiply manpower into effective performance. The more work accomplished, the more income per man you can expect.

Start planning now for the new rewards that

modern machinery offers. Watch the new combines on the farms around you. Take the measure of each make and model. Check actual field performance in acres and in bushels. Keep your eye on endurance, too. The machine you will want is the one that stays steadily on the job every day and every season. Many farmers prefer Case combines for this reason alone.

Endurance becomes even more important if you plan on custom work after your own harvest is finished. Freedom from delay means extra income and satisfied neighbors. So keep your eye on Case equipment. Look to it for extra performance and higher rewards from *your own* farm business. J. I. Case Co., Toronto, Ont.

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OH, THOSE FLIES!

by W. E. Whitehead and F. O. Morrison

FLIES have always been among the most bothersome insects with which man has had to contend, either because of annoyance or injury to him or his livestock, damage to his crops, or because they spread disease. In spite of this, flies are sometimes tolerated and apparently considered a necessary evil, without any effort being made to reduce their numbers.

Considered here are three common species of flies affecting livestock — the house-fly, the stable-fly, and the horn-fly.

The house-fly needs little introduction. It cannot bite; its most objectionable characteristics are the annoyance and irritation it causes and its association with filth in which it breeds. It is a most prolific breeder in horse manure, open latrines and various decaying matter, and from these places it flies to the barn or the house and spreads contamination.

To the average individual, the stable-fly closely resembles the house-fly. The stable-fly has one marked difference, however, it is a blood sucker; it has a formidable beak with which it is capable of piercing flesh. This species is the fly that "bites" during the still, sultry days of summer, often when rain is threatening. It prefers to breed in decaying vegetation.

The horn-fly is smaller than the preceding species. It, too, is a blood sucker which confines its activities to cattle. Masses of these flies congregate about the horns and on the withers, from which the animal has difficulty in dislodging them. It breeds in fresh cattle manure.

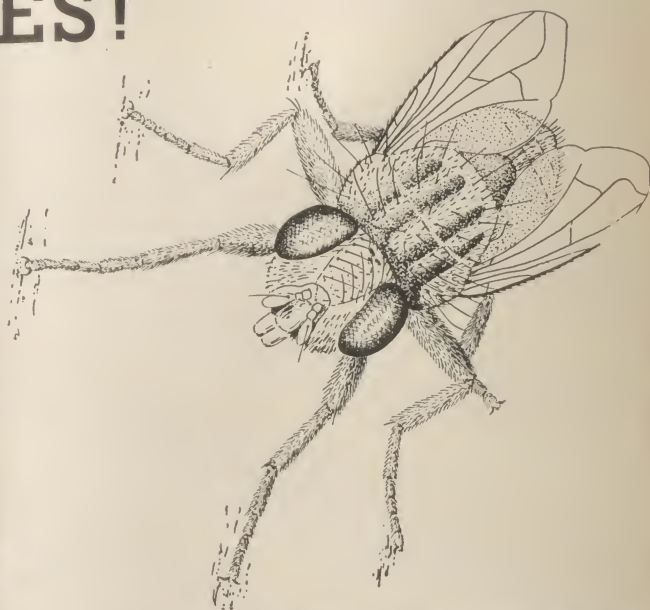
Control measures should be started early in the season. Flies are prolific breeders, and populations build up rapidly during the summer. The more flies are killed in June the less trouble it will be to keep them down later in the year.

DDT has phenomenal killing power for flies (less than 130,000,000,000th of an ounce kills a house-fly); and unlike other insecticides it retains this power for long periods, even when spread out thinly. The dry powder as a dust or suspended in water is harmless to the skin of animals, and is poisonous only if eaten.

I. For House-Flies and Stable-Flies

A. Coat exposed inside walls, ceilings, partitions, etc., of barn, piggeries, privies and other fly havens, with a thin layer of DDT. **Surfaces that animals are likely to lick or chew should not be treated.** This coating may be done by:

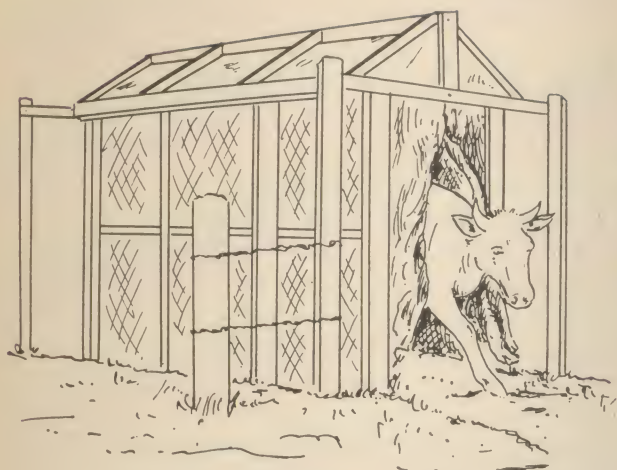
1. Applying a commercial **residual type** spray of 5 per cent DDT in a kerosene-like base at one gallon to 1,600 sq. ft. This may be painted on with



a brush or put on with a small sprayer. The object is to coat the wall and avoid loss into the air. **Do not let the solution remain on your skin or that of animals.** One treatment should remain effective for two or three months. Sunlight, the presence of rust, lime whitewash, rough cement surfaces, excessive dust, or large numbers of flies continuously entering reduce its effective duration. This is the DDT to use when fly control is necessary in dwelling houses.

2. Applying 5 lbs. of 50 per cent wettable DDT powder (Deenate 50W, or similar brand) per 8,000 sq. ft. This is the safer mixture and can be handled in greater comfort but leaves the walls temporarily wet. A garden or orchard sprayer can be used.

- B. Treat the surfaces of manure piles, piles of rotting vegetation such as straw or garden refuse with 2 lbs. of wettable DDT powder in 10 gallons of water, every 4 or 5 days. Where manure is kept in sheds, the inside walls and ceilings should be thoroughly treated at frequent intervals with these or more concentrated preparations.
- C. The above residual treatments have largely supplanted the old type household and barn sprays of pyrethrum or thanite in kerosene, but the latter are still useful to kill large fly populations in a building, or where walls cannot be treated. They are now called "space" sprays because you atomize them into the air instead of onto the walls and they kill only those flies present. Doors and windows have to be closed during their use. Many of these old space sprays have been greatly improved by adding $\frac{1}{2}$ per cent DDT so that flies knocked down all die. But not enough DDT has been added to these sprays to have any residual effect when sprayed on walls.



II. For Horn-Flies and Stable-Flies

Since horn-flies stay on the cattle day and night, that is the place to get at them. Stable-flies only remain on the animal when feeding. Here are two ways of treating.

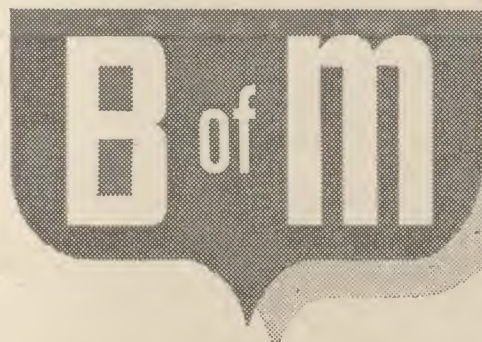
- A. Spray, wash or dip the animals with 4 or 5 lbs. of 50 per cent wettable DDT powder in 100 gallons of water, using about $\frac{1}{2}$ gallon of solution per mature animal. For horn-flies treat especially the neck, head and upper parts of the body. Where stable-flies are bad, the legs and underparts must be treated.
- B. Considerable success has been attained in Australia using a horn-fly trap constructed in a gateway or lane through which the cattle must pass once or twice a day. The passageway through the trap is 33 inches wide and 10 feet long. The glass in the roof is coated on the inside with DDT and protected from the cattle by coarse screen wire. The animal passing through the trap has to brush between and under two sets of curtains, and eight weighted strips brush her legs and belly, dislodging the flies which rise to the light and contact the treated glass.
- C. Since horn-flies breed only in cow manure good control measures include scattering fresh cow droppings mechanically with harrows, etc., and hauling out and spreading barnyard accumulations three times a week.
- D. The daily or twice daily application of the old type cattle spray of pyrethrum or thanite in oil has been replaced by the above methods but DDT in oil must not be used on animals.

Just Started On Tree Planting

While the U.S. has planted almost $6\frac{1}{2}$ million acres to trees since 1926, this is just a fair start on the job, says the U.S. Forest Service. The 75,000,000 acres still in need of planting is about one-sixth of the nation's commercial timber land.

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The Land We Live On

Filling Up Gaps in Plant Food

The soil is a sort of packing plant. If its supply of raw material includes all the ingredients of the crop, it can process them and store them for delivery to the roots when needed. But it can't compensate for raw materials in short supply, any more than a meat packing plant can produce carcasses for more cattle than it kills.

by W. A. DeLong

FEW farmers can get enough good barnyard manure to keep all their land in top form. But they can bridge the gap between their soil's fertility and their crops' needs through green manuring and using commercial fertilizers.

Green manuring is plowing down a greencrop or its aftermath to return to the soil the plant food taken up by this crop. Clover will do even more than this; it will add to each acre 50 to 100 pounds of nitrogen which it has taken from the air. It would take 5 to 10 tons of farm manure to supply this amount of nitrogen, which is the most expensive to buy of all the plant-food elements.

The amounts of phosphoric acid, potash and calcium in the surface soil may also be increased through green manuring. The greatest increase comes from using a deep-rooted crop such as clover, which draws on supplies of plant food below the reach of most crops.

The chief gain from green manuring is that it adds humus to the soil, through the partial decay of the roots, stems and leaves of the crop turned under. Humus is the natural storehouse of nitrogen in the soil, and it also holds supplies of other plant-food elements, such as potassium and calcium, in a form that plants can use.

Another virtue of humus is that it increases the soil's power to absorb and hold moisture. Since some 300 pounds of water are needed for every pound of dry matter produced in plants, this is very important to crop production, and another big point in favour of green manuring.

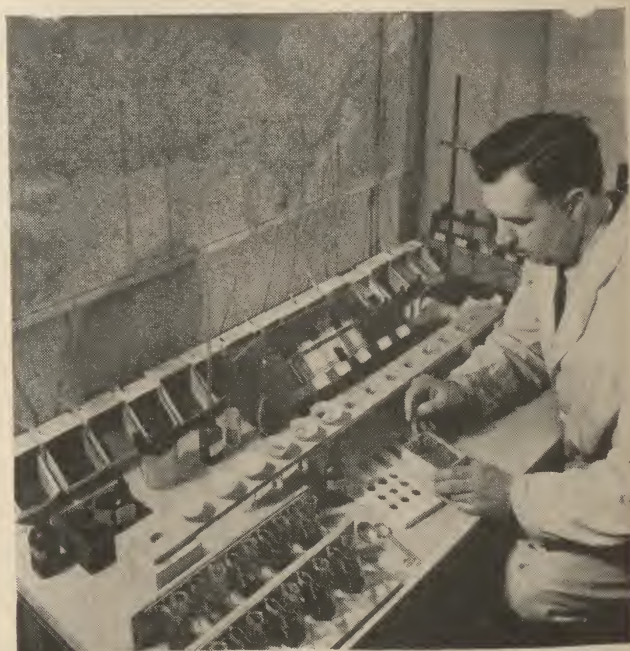
Manuring and green manuring will go a long way in building up the soil. But they cannot stop the loss of a great deal of fertility — the ingredients of the milk, cattle, hogs, grain, eggs, and anything else that is sold off the farm. And if the soil was originally low in some particular mineral, no amount of manuring is likely to build up its stock of that element. This can be done only by supplying the element itself, in the form of fertilizer.

Fertilizers can be used to provide one or more of the plant-food elements, according to what is needed. In the

past it was believed that nitrogen, phosphorous and potassium were the only ingredients needed to supply all the plant foods the soil was likely to lack. But now some fertilizers also contain one or more of the less frequently required elements, such as boron or magnesium. Boron may be of considerable benefit where turnips are affected with brown-heart, and magnesium where potatoes need more of this mineral to produce good yields.

Commercial fertilizers provide a ready means of adding plant food that is in short supply in the soil. But they cannot be depended on to correct poor soil conditions resulting from bad farm management or poor drainage. Unless they are intelligently used they may cause loss, instead of profit. This is largely because they do not supply the soil with the essential humus-forming materials provided by farm manures or green manure crops. However, on most cultivated soils it is more profitable to apply moderate amounts of farm manure supplemented by suitable fertilizers than to apply more manure without any supplement.

One of the important trends in fertilization is toward the use of high-analysis or concentrated fertilizers. Provided the price per unit of plant food remains the same, there is a saving in freight when these materials are used. For example, double superphosphate contains about 800 pounds of phosphoric acid per ton, compared



A soil sample is tested by R. Snyder of the C.I.L. to discover what type of fertilizer it requires.

with about 400 pounds for ordinary phosphoric acid or superphosphate. If double superphosphate costs twice as much as the other at the factory, it is possible to save the freight on one ton of material from the factory to the farm.

But in using concentrated fertilizers it must always be borne in mind that there is more danger of damage from contact with young plants, and care must be taken in applying them.

Lime, which contains calcium, ranks next in importance to nitrogen, phosphorous and potassium as a plant food. In addition, lime is valuable indirectly, to correct soil acidity and to assist crumb formation in the soil. It is also needed to help change soil nitrogen into a form that plants can use.

Most soils contain enough calcium for use as plant food, but many have not enough to keep them from becoming acid, or to encourage crumb formation and make the necessary change in nitrogen. So the indirect effects of lime are usually of more importance than its direct value as a plant food. Because of this lime is known, not as a fertilizer, but as a soil amendment.

The most commonly used form of lime is ground limestone. Its suitability as a soil amendment depends on its purity and fineness — the finer it is, the better. Marl, when pure enough, is a good source of lime.

Legume crops such as red clover need considerable calcium for good growth, and do best in soils low in acidity. But potatoes will thrive in a soil that is strongly acid, and often become scabby in non-acid soils. Crop yields may also be lowered by applying too much lime. So lime, like fertilizers, must be used with care. Agronomes or agricultural representatives can help farmers to decide whether to lime, as well as what fertilizer to use, and how much of each to apply.

Says Corn Offers Opportunities

Corn has great possibilities as an extra cash crop for Canadian farmers, M. Aamodt of the Canada Starch Co. Ltd., recently told the Agronomy Club at Macdonald College. The best Canadian corn is as suitable for processing as U.S. corn, and our farmers have a 15 cent advantage over U.S. corn on our market — 5 cents in freight and 10 cents in tariff.

Mr. Aamodt pointed out that a 120-day corn, if it reaches maturity, gives a higher yield per acre than a 100-day or 90-day variety. But where the season is too short for the later variety to ripen, a 90-day sort will outyield it, and produce higher quality kernels.

Cribbed corn keeps better than shelled corn, is more uniform in moisture content and so brings a higher price. Processors prefer it because it provides a year-round supply.

Mr. Aamodt said his company was trying to develop corn as a community crop, with each farmer growing five or six acres. One farmer could buy a planter, one a picker, and one a sheller, and through co-operative use of these machines the cost could be kept down.

TOUGH AS CROCODILE HIDE



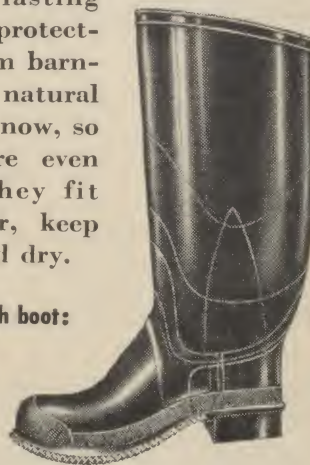
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What's Over the Market Horizon?

With farming becoming more specialized and transportation more important, the farmer has an ever-growing interest in bringing about stable markets and price agreements to insure his future.

by J. E. Lattimer

FOR the first time in history, the world is now considered able to provide its people with plenty of food. This has been made possible by a number of developments including scientific agriculture, improved transportation, and the processing of products to provide a fairly regular supply. These developments permit specialization of production, internationally and within countries, providing goods in greater volume and, in many cases, at less cost.

Specialization enables people to live far from where their food is grown. This increases the importance of distribution or marketing. So scarcity or famine may now develop from at least two causes. One of these is failure of the harvest; the other is poor distribution of supplies after they are grown. This more recent development has resulted from sectional specialization.

Scarcity is now more likely to spring from a breakdown in distribution than from short production, since the processing, transportation and distribution of food products generally are handled by workers who are organized, and occasionally go out on strike, while most food products are grown by farmers who seldom resort to strikes.

Before it can be eaten, food must be grown, processed, shipped to where it is needed, and released when it is wanted. With many people living so far from the source of their food supplies this piles a terrific burden on the marketing machinery. It is crystal-clear that any hitch in marketing may lead to scarcity in some sections, even when surpluses exist elsewhere. It would be hard to tell potato growers in New Brunswick and Prince Edward Island that they had no surplus in a period of world food scarcity. And it might be hard to convince U.S. citrus fruit growers that they have no surplus right now.

Levels of Trade

Marketing problems exist at the international level, the continental level, and also the national and local levels. World wars interfere with trade by changing international boundaries. The food riots in the British Zone of Germany have been explained by a German as not so much directed against British supervision as a demand for the Ruhr to receive its customary supplies from the surplus area of food production in pre-war Germany, part of which is now Polish territory and the present dependence of the Ruhr on imports of food



"How will the market be next fall?" is a question that troubles every farmer from the start of the season.

from North America has meant a stronger market for Canadian farmers.

International loans are necessary in wartime and in the postwar transition period, and the International Bank has been set up to make loans to needy nations. This may be the only way that trade between nations can be kept moving for a few years. Yet people and nations eventually tire of one-way traffic, and the only permanent basis for trade is a two-way exchange of goods and services.

The Continental Level

It is a peculiar situation when the Canadian price level is lower than that of the U.S., and at the same time the Canadian dollar is worth only 93 cents in New York. The record of trade between the two countries in 1946 may have something to do with this. Canada bought from the U.S. \$500,000,000 worth more goods than the U.S. bought from Canada. The high prices of our imports — cotton, for example, have also contributed to this adverse trade balance.

The chief marketing problem between Canada and the U.S. is the difficulty of carrying on three-cornered trade. In the past Canada sold to Britain and bought from the U.S., leaving Britain and the U.S. to settle accounts. But this system is now more difficult to work,

because of the three countries' shifts in production since 1938.

In the meantime the U.S. has found itself badly in need of some Canadian products, such as newsprint and other wood products. These, together with mineral exports, including gold, should provide Canada with the means to continue as Uncle Sam's best customer.

Canada might help to square accounts with some surplus farm products. But right now Canada has imposed embargoes against sending some products there, and the U.S. has imposed tariffs to keep other products out. These difficulties may be ironed out; but right now they are big barriers for trade to hurdle.

Domestic Level.

Canada has a big stake in international trade. In agriculture, with 60 million acres in field crops annually and about 12 million people, this point needs no elaboration. Yet sectional specialization within the country means that while some sections cater to an export market, others depend largely on selling their products right in Canada. And they can be sold only as long as people have the means to buy them.

Contract Prices

Provision has been made, through loans, to ensure overseas purchasing power for the immediate future. At the same time contracts assure us that for a few years definite quantities may be disposed of at agreed prices.

Forward price agreements are no new development. What is new is their application to agriculture. The Financial Times recently noted that as far back as 1922 a 10-year contract for over \$70,000,000 worth of pulp was drawn up between the European Ludgate Syndicate

and the Saguenay Pulp and Paper Co. in Quebec.

It is quite understandable that users of pulp may feel more secure if they know that their supplies are assured for 10 years in advance. It is just as logical to expect food buyers to want to know where their next meal is coming from. So it is rather surprising that it took 25 years for agriculture to copy what was being done in other industries.

The trend toward long-term contracts is quite evident. This spring some 40 countries met to decide on both floor and ceiling prices for wheat entering international trade. These countries include both exporters and importers. They agreed on a two-year floor price of \$1.30 per bushel, and a ceiling set at \$1.80, but could not agree on floors for 1949-50 and 1950-51. The matter is being turned over to the International Wheat Council, with the hope that complete agreement will be reached.

The contract prices now prevailing between Canada and Britain in wheat, cheese, bacon and eggs are not expected to interfere with freer international trade. A clause in the contracts enables them to be incorporated into any larger program that may be set up.

Future Prospect.

Just how satisfactory these contracts may be will depend on a number of things. The first is how soon Europe will be back to normal production. Europe is about half way back to normal in wheat production. The 1935-39 average is given as 1,670 million bushels, the 1945 harvest 1,030 and 1946 1,350 million. It seems clear that the present wheat problem in Europe is largely one of marketing.

(Continued on page 15)

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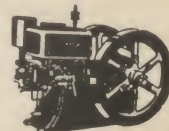
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Travelling in the Maritimes

A Visit to Lawrencetown

by L. H. Hamilton

LAWRENCETOWN is a district noted for its good fishing. Salmon are caught by the fly, while splendid trout are abundant within six miles. The town itself is located some 60 miles west of Kentville, in the Annapolis valley.

To an agriculturist Lawrencetown is the centre of a progressive agricultural district. This is evidenced by the four apple packing warehouses, a barrel factory and an apple evaporator. There are, in addition, excellent fair grounds equipped with a nicely appointed building for the annual fair; an excellent school which provides educational facilities up to grade 12, and sufficient places of business to accommodate the surrounding district.

Like most places of interest, it is the people who provide the most lasting impression. There is for instance Chester Barteaux. A modest farmer, living within three miles of the town, Mr. Barteaux is primarily an orchard man, having some 30 acres of good orchard and sufficient additional land to feed and pasture a herd of 25 purebred Hereford cows and their progeny. He purchased and settled on his present farm after he had returned from World War I.

In spite of very small means and the fact that he was entitled to Soldier Settlement benefits, Mr. Barteaux decided to purchase his own farm and make his own financial arrangements. Having selected well, and then having farmed well, he has been able to meet all his obligations, rear and educate a family, and take an active interest in community affairs. Community affairs are quite important to the farmers of the Maritimes, who produce a surplus of apples and other crops and must find a market for them. To do this they work together or co-operate in marketing their crops.

Last year, Mr. Barteaux stated, he could have sold his crop privately for considerably more money, but he did not. He figured that somebody had to bear the overhead cost of the community organization and since he had apples he ought to pay a little more than those less fortunate.

One of Mr. Barteaux's sons is at home on the farm. Already married and the father of a small family, he shares the responsibility of the farm work and management and lives in part of the delightful farm home.

Speaking of farming opportunities, Mr. Barteaux thought there was still plenty of opportunity to do as well as he had done in the Maritimes, and right at Lawrencetown. The young people are leaving, he said, but he did not suggest a solution except to state that

the living conditions on many farms were not sufficiently attractive.

In spite of being an orchard farmer, Mr. Barteaux gets a great deal of satisfaction and profit from his Hereford herd. The quality of his cattle is good, as is indicated by the fact that he won both male and female championships at the local summer show. The demand for breeding stock has been keen, and all surplus stock has been sold.

In talking over the merits of the individual cows, calves and bulls, Mr. Barteaux displayed a keen appreciation of each. But he thinks there is still room for improvement and aims to bring this about by going further afield for breeding stock.

We next made a brief call on brother Charlie Barteaux who is just as enthusiastic over sheep breeding. We inspected the flock of some 40 ewes with their lambs. The Cheviot breed is a favourite and we spent some time admiring the shearling Cheviot ram purchased a year before from Macdonald College. The lambs were good considering the time of year and the prevailing dry conditions.

The story of Lawrencetown would not be complete without some mention of Harold Nason, Inspector of Schools for the Province. Mr. Nason was principal of the school for a number of years and during that period became well known by practically everyone. Farming is Mr. Nason's hobby. He enjoys talking to and associating with farmers. Living on the outskirts of the town and having some accommodation for stock he always manages to have a few pigs, a couple of oxen and, from time to time, cows, chickens and horses. His young son, now 11 years old, is quite as enthusiastic as his dad, but specialized last year in strawberries. From a small patch he managed to sell \$100 worth.

While Mr. Nason's hobby is farming, his real interest is in education. He is particularly proud of the new educational set-up in Nova Scotia and the opportunity it provides for establishing schools and maintaining highly qualified teachers. His philosophy of life can best be summed up in the scriptural passage: "Ye shall know the truth and the truth shall set you free."

Knowing the truth, or the facts, solves many problems and avoids many would-be problems. This was illustrated by Mr. Nason while relating some of his experiences both as a teacher and school inspector. People have trouble because they do not know the facts, Mr. Nason holds. To get many of these facts he spends much time visiting among the people and getting to know them. Through the information he gathers many "would-be" serious problems are solved before coming to a head.

OVER THE MARKET HORIZON

(Continued from page 13)

The hard winter in Europe may slow down agricultural reconstruction. But the United States may possibly harvest 1,200 million bushels of wheat, which would be so far in excess of domestic needs that it would do much to change the world wheat situation from scarcity to plenty.

The success of contract prices depends largely on whether the prices agreed on bring the required supplies. Scarcity of almost anything may be taken as proof that the price has been too low to provide requirements. If surpluses develop they may indicate that the price is too high. Re-negotiation of contracts may be welcomed in either case, by both the buyer and the seller.

It is not hard at present to arrange long-term contracts with importing countries. But there are many farm products that are practically confined to the home market, and for these there are no long-term contracts. Some of them, such as fluid milk and canning crops have some measure of advance regulation of prices. Others are left largely to the competition of demand and supply.


The tendency at present is toward a greater degree of price regulation of all farm products, — whether dependent on local, distant or export markets — due chiefly to producers' demand for greater price stability. How far this tendency may go it is impossible to say. But one thing is certain — the success of price regulations will depend on their flexibility.

How Feed Affects Breeding Ability

How does feed affect breeding ability in farm livestock and poultry? This question will come under close scrutiny at the Nutrition Conference being sponsored by the Canadian Feed Manufacturers' Association. Eastern Division, at Macdonald College on June 11-13. Four top U.S. authorities are slated for the program, as well as several of Canada's leading experts.

The conference will follow the same pattern as last year's informative sessions, which included talks by experts and question and answer periods, and also provided enjoyable get-togethers for relaxation. Arrangements have been made for Macdonald College to supply rooms and meals for those attending the conference, at nominal charges.

This nutrition conference is meant to bring the latest information to key men interested in nutrition. As an animal's breeding and health naturally influence its ability to make good use of feed, talks by authorities on genetics and health are included in the program, which has been especially planned to meet the needs of agronomes and veterinarians, as well as feed men.




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DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

Is Flax a Paying Crop Under Present Conditions?

In 1939 Quebec farmers planted 4,494 acres in flax: in 1944, urged on by various authorities and encouraged by better prices, they grew flax on 28,091 acres. In 1939 there were only two mills in Quebec where the flax could be processed: one at Beaujeu and another at Ste. Anne de la Pocatiere. In 1944 there were twenty-three, nineteen of them owned and operated by co-operative organizations. Over a million dollars are invested in these plants, nine-tenths of which capital belongs to the producers themselves.

It is quite true that hope of profit inspired these co-operatives to organize flax mills, but it is also true that, in so doing, they were also thinking of the future stability of the flax growing industry. And, having invested all this money, it would be a most unwise move now to decide to eliminate flax from the cropping programme.

A number of farmers are saying, "We never made any money out of flax, so we might as well get out right away, even if we have to lose the money we have put into these mills."

Admittedly, growing flax presents many problems, perhaps more problems than any other crop. But most growers will also admit that, given a good harvest, flax is a profitable crop—in some cases, a very profitable one indeed. Good harvests depend to a large extent upon the season, and it is no exaggeration to say that the 1946 season was probably the worst one for this crop that we will ever have. But, for all we know, 1947 may be just the reverse and we may get a bumper crop instead.

Flax yields of late have not reached the levels of 1940 when, in spite of lack of experience on the part of many farmers who were growing this crop for the first time, 385 farmers harvested an average of 259 pounds of fibre per acre. There are two reasons for the reductions in yield that have come about since then. One is unfavourable weather conditions, about which we can do nothing. The other is the fact that too many farmers tried to grow too much flax without the proper facilities to look after the crop properly.

Flax is not a crop that can be handled like the hay crop. Flax demands a fertile soil, very carefully prepared and free from weeds. Special care must be given during pulling and retting. Every time it is handled it must be remembered that this is a special crop in which



Pulling a good crop of flax with modern equipment.

care and attention will pay big dividends. It is largely because these points were not remembered that our yields have been falling off so drastically.

Flax Can Be Profitable

Under present conditions, is flax production a paying proposition? Yes, undoubtedly, provided that yields per acre are high enough. Present prices are higher than those offered in 1940. Labour costs more, but even with a yield of 150 pounds of fibre to the acre, flax is a profitable crop, and 150 pounds is 109 pounds less than 385 farmers harvested in 1940. A high percentage of fibre as compared with tow is the important thing to aim at, and yet in this province we are getting two pounds of tow for every pound of fibre. This proportion should be just the reverse, but as long as we continue to grow flax that is full of weeds, and until we learn to handle the



384 Vitre St. West
MONTREAL, QUE.

crop more carefully, we won't increase the proportion of fibre.

A study was undertaken by the Department of Statistics of the returns which were obtained by the ten best growers in various districts. The figures given below show net returns after deducting processing costs.

		Per acre
Kamouraska.....	7 year average.....	\$165.38
Kamouraska East.....	4 " "	145.97
Montmagny.....	4 " "	102.82
Témiscouata.....	3 " "	93.84
Vaudreuil-Soulanges.....	5 " "	87.07
Maskinonge.....	5 " "	73.65
Bois Francs.....	5 " "	117.67
Bois Francs.....	4 " "	48.04
Ste. Martine.....	5 " "	118.70
St. Maurice.....	5 " "	87.44
Gentilly.....	4 " "	54.82
La Baie.....	4 " "	56.75

Another study was made to determine the net profit in growing flax, after deducting all costs. This study was made on 155 farms with no attempt being made to pick out particularly good nor particularly bad ones. The following figures cover the operations for five consecutive years.

	Cost of production and haulage to mill	Processing Cost	Net Profit per acre
Kamouraska	\$42.59	23.80	55.80
Ste. Martine	35.50	35.70	43.81
St. Maurice	32.43	28.68	26.18
Montmagny	33.72	34.30	23.05
Maskinonge	31.22	24.45	14.48

Cost of production has not increased since these figures were made up, but processing cost has probably increased to some extent. The price received for fibre is lower than it has been during the past two years, but is likely not below the average price during the five-year period covered by the study mentioned. In other words, the picture is not as bad as some people claim it is.



Scutching flax by hand

A SALUTE to the Dairy Farmer



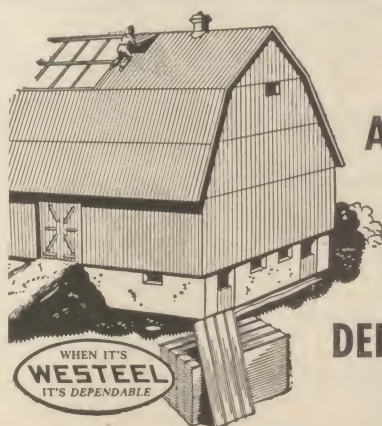
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Why Not Raise Our Own Horses?

Last year, Quebec, the Maritimes, and certain eastern States imported some 2,000 horses from Western Canada. Ten thousand of these were brought onto Quebec farms. These figures were quoted at the annual meeting of the Quebec Belgian Horse Breeders Society, held in Montreal on April 7th, by Mr. J.N. McCallum, and formed the basis for a plea for increased breeding of horses on the farms in this province.

Mr. McCallum, of the Federal Department of Agriculture, is retiring this year and in what was his final official appearance in Montreal, thanked the members of the society for fifteen years of pleasant co-operation. He foresaw a bright future for horse breeding in Quebec, and thought that a more aggressive policy of salemanship should be adopted by Quebec farmers who raise horses. Notwithstanding the trend toward mechanization, there is place on every farm for a good team, and why should Quebec farmers buy 10,000 horses every year when they might just as well raise the horses themselves?

The guest of honour at the luncheon was the Belgian Consul, Jean Querton, who was accompanied by the Secretary of the Belgian consulate, Mr. Maurice Haynes. Alderman J. O. Asselin deputized for Mayor Houde, who had been invited to attend.

Resolutions adopted by the meeting asked the authorities of the Quebec Fair to make improvements to the stables on the Exhibition grounds, and requested the Department of Agriculture to continue the 20% grant toward the purchase of pure-bred horses. A registration system for horses, similar to that in operation for dairy cattle, was asked for.

Officers elected for the coming year included the Hon. Antonio Elie, honorary president; J. J. Ste. Marie, president; Albani Nichols, vice-president. Directors are Messrs. George Denis, Brother Firmin, Philippe Toupin, Omer Lavigne, Antonio Elie, Donat Giard, J. A. Beausejour and Maurice Joubert. Delegates to the National Association are Gustave Toupin and Gaston Masson.

New Techniques in Sugar Making

Messrs. Jacques Tardif, chemist, and N. Rompre, maple products instructor, have been doing some experimenting at the Department's sugar bush at Plessisville. One of the most important objects of their research is the use of oil instead of the traditional wood for evaporating.

Oil gives a steady heat and an oil-burner does not require the constant stoking and attention that wood fires do. In many districts wood must be purchased to run the evaporators, and if oil can be used as cheaply it will be a decided advantage. Such items as initial cost of installing oil burners, cost of fuel oil, the daily evaporating capacity, saving of time, if any, when using

the steady heat of an oil burner, and many other items are being studied.

A small, motor-driven portable drill for tapping is also being studied. The outfit weighs about 35 pounds and is carried like a haversack on the back of the operator. It is claimed that with this drill one man can tap from 300 to 500 trees a day.

A New System For Judging the Agricultural Merit Competition

More importance will be given to livestock, and to the comfort and suitability of farm buildings

Beginning with the 1947 competition, farms entered in the Agricultural Merit competition will be judged on a new scale of values, which will give more weight in the final result to such items as livestock, the farm garden, condition of farm buildings and implements and to handicrafts.

The new score card is as follows:

	Points
I. The farm as a whole	200
1. General administration	100
2. General appearance	50
3. Improvements	50
II. Field work	275
4. Land management	50
5. Fertilizers, etc.	50
6. Use of rotations	25
7. Field crop harvests	100
8. Cash crops	50
III. Livestock and Equipment	275
9. Cattle, poultry, etc.	100
10. Feeding methods, yields	100
11. Farm machinery	50
12. Repair equipment	25
IV. Farm Buildings	150
13. Quarters for livestock	50
14. Storage for farm crops	25
15. Miscellaneous buildings	25
16. The farm house	50
V. Miscellaneous	100
17. Conveniences	35
18. Farm gardens	20
19. Household activities	20
20. Accounting system, etc.	25
	1000

Farm Land Values Are Up

Farm lands are now worth 28 percent more than in pre-war years, the Dominion Bureau of Statistics reports. The average value of occupied farm lands in Canada for 1946 was \$32 per acre. This represents an increase of seven percent over the average values in 1944 and 1945.

The upward trend in farm land values states the Dominion Bureau of Statistics, reflects at least in part the relative changes which have occurred in the price levels of farm products and of the things which farmers buy. The Bureau's index of farm prices of agricultural products for 1946 was 83.5 percent above the 1935-39 level, while for the same year the index prices of commodities and services used by farmers had advanced 45.4 percent from the 1935-39 base-period level.

Increases in farm land values over 1945 levels were reported in all provinces with the exception of Prince Edward Island and New Brunswick, where slight decreases occurred.

Market Comments

With this issue quotations of prices on linseed oil cake meal are resumed. For some years now quotations on this feed have not been available. This resumption it is to be hoped may be taken as a sign of the times.

Live stock prices continue to be high, particularly as compared with the previous year, with the exception of lamb and poultry. Beef cattle and hogs are about two dollars per hundredweight above the price of last year. It has been pointed out that the scarcity of beef may be expected to continue until July or August when grass-fed cattle arrive.

The Argentine Government is reported to be negotiating bulk sales of the new corn crop with foreign missions at from \$1.66 to \$1.88 per bushel. The Government does not hope to move more than half the crop. The balance will be sold to hog and poultry feeders at 53 cents per bushel on the farm.

The attempt to set maximum and minimum prices of wheat for the next five (5) years between the major exporting and importing countries has so far failed.

Sales of fluid milk in Ontario for both January and February 1947 were off 5 percent as compared with the corresponding months of the previous year. Less milk being consumed in fluid form leaves more to be manufactured into butter which reports a slight gain in the period.

Trend of Prices

	April 1946	March 1947	April 1946
	\$	\$	\$
LIVE STOCK			
Steers, good, per cwt.....	13.05	14.10	14.46
Cows, good, per cwt.....	9.80	11.02	11.25
Cows, common, per cwt....	7.60	9.03	9.23
Canners and Cutters, per cwt.	6.48	8.12	8.35
Veal, good and choice, per cwt.	14.47	17.05	15.73
Veal, common, per cwt....	12.10	15.60	14.27
Lambs, good and choice, per cwt.	—	15.75	16.13
Lambs, common, per cwt...	—	14.75	11.95
Bacon hogs, B1, dressed, per cwt.	19.26	21.90	21.85
ANIMAL PRODUCTS			
Butter, per lb.	0.40	0.41	0.41
Cheese, per lb.	0.22	0.23	0.23
Eggs, Grade A, large, per dozen	0.35	0.36½	0.36½
Chicken, live, 5 lb. plus, per lb.	0.30½	0.29	0.29
Chickens, dressed, milk-fed A, per lb.	0.37½	0.35	0.35
FRUIT AND VEGETABLES			
Apples, B.C. Newtons, per box	—	3.75-3.80	—
Winesaps	4.09	—	—
Potatoes, Quebec No. 1, per 75 lb. bag.....	2.00	1.15-1.25	1.25
FEED			
Bran, per ton	29.00	29.00	29.00
Oil cake (38%), ¼ ton lots, per ton	—	—	45.25

Of Interest to
AGRICULTURISTS
THE NUTRITION SCHOOL

at

Macdonald College

June 11th, 12th and 13th

Sponsored by

The Canadian Feed Manufacturers Association
Eastern Division*This advertisement by courtesy***MAPLE LEAF MILLING CO. LIMITED**
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Second NUTRITION Conference

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JUNE 11-12-13—1947

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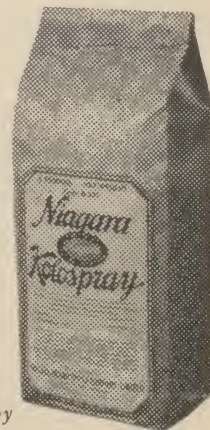
83% SULPHUR—
micro-fine, contains bentonite-sulphur.

HIGHLY WETTABLE
the bentonite-sulphur content assists adhesion in wind and rain.

LOW CAUSTICITY—
Kolospray is a processed sulphur, and is much less caustic than elemental sulphur.

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BURLINGTON, ONT.





THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Health in Rural Quebec

Extracts from the Quebec Letter as prepared by

When we take into consideration the health needs of the rural population of the Province of Quebec we find that prior to the institution of the Health Unit System, rural public health service was nil. The Health Unit has expanded since 1926 until 93% of the rural population are covered by its public health service. This paints a glowing picture, which at a glance would place Quebec Province on the summit of public health achievement. Unfortunately, when we turn to statistics and note the figures on infant mortality and on tuberculosis, the thin edge of doubt creeps in.

We must not allow ourselves to forget the all-importance of rural health. The farmer's health is his chief capital. This applies equally to his wife and family. At the present time, many of our rural people are in need of curative measures, and in dire need of medical, nursing and hospital care, as well as dental services — none of which are included in the Health Unit system. It takes no great amount of imagination to understand the financial difficulties which may hinder the carrying-out of many excellent Health Unit recommendations. Whether it be the need to procure eye glasses, the need of dental service, removal of tonsils, extra provision for effectual care of tuberculosis and infectious diseases, or the actual care of mother and child at birth — may, by force of circumstances, be quite beyond the control of intelligent people, and can in no way be attributed to ignorance on the part of such persons.

All this does not reflect in any sense upon the Health Unit system as such — but rather purposes to show the need for something more than public health, if we are to have a complete health service. It is apparent that at the present time, the Health Units of the Province are doing a wonderful job in preventive medicine, although they are handicapped by lack of adequate personnel. With existing conditions and limited staff, it cannot be supposed that miracles, even of prevention, can be performed. Some form of bonus might well be offered to doctors to encourage them to enter rural health service. It is not humanly possible for the personnel of Health Unit to cover adequately the territories or the numerous duties assigned them.

The Health Unit system lays no claim to curative measures — it refers the patient to his own doctor for

Mrs. Grant LeBaron for the Health Study Bureau.

treatment. Being the only rural health service, it has undoubtedly been accepted at times on the principle that "part of a loaf is better than none." There is nothing compulsory about the service, and no intermediary to join the clinic to isolated persons in scattered rural districts; the result being that those in need have no contact with the clinic, and what is everybody's business becomes nobody's. If we are to have a normal sense of security and well being, we must, with public health, have access to medical and nursing services and hospitalization. The success which we, as Canadians, have in making such health provisions will determine in a large measure the kind of people we will develop, and the kind of nation we become.



Mrs. Alfred Watt,
M.B.E., president
A.C.W.W. and Mrs.
C. E. Dow, O.B.E.,
president F.W.I.C., on
the campus of
Macdonald College.

Quebec Will Be Represented At the International Farm Women's Congress at Amsterdam

Farm women the world over will hold their first congress since 1939 in Holland, September next. Feminine groups of 34 countries are affiliated to this Association, known as the Associated Country Women of the World.

Quebec farm women will be represented at these important sessions by Mrs. Charles Smallman, of Dundee, Que., president of the Quebec Women's Institutes, Inc. The Hon. Laurent Barre, Minister of Agriculture, has just consented to a generous grant in favor of Quebec Women's Institutes to help to defray the expenses of this delegate to Amsterdam.

Which Road from Here—Peace or War?

Jean S. Abercrombie

Representative of the F.W.I.C.

An impression from my visit to the headquarters of the United Nations Organization at Lake Success, N.Y.

Those of us who have lived through two world wars, have begun to realize the cost of war;—those dear ones who sleep "over there", in that little plot which "will be forever" Canada; those who have come back to us with broken lives, lame, blind and diseased; those millions of dollars poured out for munitions of war, planes, tanks and ships; the heavy taxation to repay this in our generation and in those to come; — a million homes destroyed in England alone, — a million displaced persons without home or even country, wandering up and down Europe. All this is the price of War.

NOW, WHAT OF PEACE? The Social and Economic Council of the United Nations Organization issued an invitation to **International Non-governmental** organizations to meet in Conference at the United Nations headquarters at Lake Success, N.Y., from Feb. 10 to 14, 1947. Mrs. F. G. Boudreau, who has been an observer for the Associated Country women of the World at the U.N. headquarters, arranged for a delegation to represent the A.C.W.W. Mrs. C. E. Dow, President of the Federated Women's Institutes of Canada, was asked to represent Canadian Institute women (the F.W.I.C. is a unit of the A.C.W.W.) Mrs. Dow was unable to accept, and asked me to replace her. There were seven women in our group representing the A.C.W.W. Mrs. Russell from England, who was on a speaking tour in the U.S., myself from Canada and the remainder American. Our organization, by reason of its objectives of improving the conditions of rural life,—in health, housing, education, food and agriculture, and its stand of being non-sectarian and non-political, with, before the war, twenty-six nations represented, was ranked among the leading International non-governmental groups.

THE SOCIAL AND ECONOMIC COUNCIL

This Council was formed to give expression to one of the "Four Freedoms of the Atlantic Charter", — the Freedom from Want, on the principal that if peoples are fed and clothed and housed and their legitimate rights safeguarded, they will not desire to resort to war. At the Conference, which was called by this Council, many of these problems were explained and discussed by various speakers; as those relating to International Labour, to Food and Agriculture, to World Health, Human Rights, Status of Women, Narcotic Drugs, etc.

The means by which information concerning the activities of the Social and Economic Council is distributed — by press, radio, films, bulletins and pamphlets

and also by qualified speakers was described in detail.

OBJECT OF THE CONFERENCE

The whole object of the Conference was to place before the International organizations the world-encircling aims and objectives of the Social and Economic Council; the International organizations pass on the information to their national groups and through them and their units right down to the individual members; the principle being that "the desire for war arises in the minds of men and from the minds of men must come the building of the Peace." Conversely, it was pointed out that any group of peoples having a legitimate grievance might present their case to the Social and Economic Council and have a hearing.

We were urged to form study groups and discussion groups with representative organizations and become informed on world problems and the effort being made to solve them. Information and pamphlets could be obtained from U.N. If organizations could assist by reprinting, it would be of great benefit as funds are limited. (The United Nations Society, which has given us speakers at our Q.W.I. Conferences, is an accredited source of information.)

OUR CHANCE

Mrs. Russell, our A.C.W.W. representative from England, described the situation very well. She said, — "The League of Nations set up the machinery for world peace, but it collapsed because it did not have the support of all the peoples of the world. Again we have another chance, with the United Nations Organization, again we have the machinery, improved in many ways, but the people, — you and I and every last one of us, must supply the Power to make it work."

"Without vision, the people perish". We have the vision in the U.N. Organization, read about it, study its programme, support it, make it work; — otherwise another world-war will mean the end of our civilization.

Gaspé President in Alberta

At a Jubilee Banquet held on Feb. 19 in the Club Cafe by the Lethbridge Women's Institute and the meeting which followed, one of the guest speakers was Mrs. Gerald Miller, President of the Gaspé Co. W.I. Mrs. Miller gave an outline of the organization and procedure of the Quebec Women's Institutes and told of some of their objectives and work accomplished.

The Month With the W.I.

Annual meetings are perhaps, the most important of them all. The work accomplished during the past year is reviewed and plans made for even better things in the months to come. All reports are permeated with an enthusiasm that will certainly ensure another successful year for the Institute.

Argenteuil: All branches report annual meetings; for one, Arundel, this is their first. Two quilts were donated which are to be raffled. Brownsburg realized \$78 from the showing of the film "Dragonwyck" and suggest all W.I. members try and see this picture if possible. The president was presented with a life membership pin and the retiring secretary with a pen in appreciation of their faithful service. Jerusalem-Bethany made two quilts to be included in their personal parcel. \$15 was donated the Red Cross. Lachute discussed the Lady Tweedsmuir Competitions. One new member was enrolled. Lakefield donated \$5 to the Red Cross and discussed Fair work. A travelling apron is to be used to increase funds, an original verse of poetry is to be put in each "pocket" with the money donation. Books have been ordered from the English Institute gift. Morin Heights also discussed fair work. \$5 was sent the Children's Memorial and quilt blocks were brought to the meeting. Pioneer welcomed a new member and staged a salad contest. Again we find fair work discussed. Upper Lachute and East End presented Red Cross pins to deserving members.

Bonaventure: Port Daniel is sending a stamp album to a little boy in England. The Lady Tweedsmuir Competitions were discussed. Shigawake voted \$10 to "Save the Children".

Chat-Huntingdon: Four annuals here; Aubrey-Riverfield, who are purchasing F.W.I.C. seals,—Franklin Centre, Howick, which found time for a travel talk on Vancouver and Los Angeles,—and Ormstown. The last had a reading of notes prepared by a member on the CBC broadcast given on Feb. 19 describing the founding of the W.I. Hemmingford held an evening meeting when a technicolour film on garden pests and methods of combatting them was shown. F.W.I.C. seals were ordered and \$10 voted the Red Cross.

Compton: Five annual meetings here. Brookbury gave \$10 to the Red Cross, \$11 for school prizes, gave a bag of flour to a needy family and held a coin shower for a new baby. A "bee" is being held to clean their hall. Bury made their first payment on the Sherbrooke Hospital Co. project. The membership fees were raised to 50 cents. Canterbury reports the "travelling basket" has finally come home with the sum of \$9 contained therein. Scotstown gave \$10 to the Red Cross. An interesting story of their library project was enclosed.

We are to hear more of this later. Sawyerville made \$25 at a card party and gave \$10 to the Red Cross.

Gaspe: This time three annual meetings. L'anse aux Cousins discussed the Blue Cross. Sandy Beach held an auction of home-made cooking. A paper was read, "Queens did better than Kings", and an original poem, a tribute to the founder of the W.I. Wakeham reports only the routine connected with their annual. York discussed a lending library (more power to you) and the sending of food parcels to other European countries than Britain.

Gatineau: Wakefield conducted an Irish charade, the words chosen being Dublin, Belfast and Blarney. One member has furnished a jar of home made soup weekly to the school hot lunch project and another sent new clothing to Wakefield, Eng. to be used at a bazaar in aid of bombed churches. Wright voted \$10 to the Red Cross and \$7 to Kazabazua school fair fund. A box of clothing was sent the Superfluity Shop, Ottawa, and crib covers are being made for "Save the Children". \$4.75 was realized from a sale of handwork and here is a bit of human interest, an announcement of the birth of a son to Mr. D. Wallace, formerly of H.M.C.S. Gatineau, was received.

Missisquoi: St. Armand reports a most successful annual meeting.

Pontiac: Here we find nine annuals reported. Beech Grove found time to make a quilt at theirs. Bristol Busy Bees discussed the Blue Cross. Clarendon sent a donation of canned food to the Community Hospital and a layette to a mother in Scotland. Two quilts were made, one was given to a family that had lost their home by fire, the other is to be sold. Elmside also gave a quilt to the fire sufferers. A humorous reading was enjoyed, "Andy Gump at the W.I." Fort Coulonge had a demonstration on new ideas for hanging curtains and other household hints were given. The history of the Institute



Members of Brownsburg W.I., taken at Macdonald College.

movement was read and extracts from the minutes of their own branch since it was organized in 1918. Shawville entertained their county president, Miss Pritchard, who gave a talk on Institute work. Stark's Corners made 20 infant dresses for the Community Hospital. \$35 was made at a box social. Quyon made plans for the fall fair. Wyman had an Irish programme and Mrs. Dow's letter was discussed.

Quebec: Valcartier is giving \$25 annually for prizes in the ski contests for their young people. \$15 was also voted a resident who had lost his barn by fire. Quilts are being made and one sold at a social evening, netting \$22.50 for the treasury. Help is being given a war bride. Another member joined making a total of 55 on the roll.

Richmond: Four branches report annual meetings in this county. Cleveland handed in the talent money and a gift was presented the member raising the most by this method. The Blue Cross secretary also received a gift. A donation was made toward the County Hospital Project. Dennison's Mills made \$6.88 from sales and \$4.70 by a card party. A paper was given on Health. Richmond Hill paid their contribution \$40, towards the county project and held a shower for a new baby. Spooner Pond also forwarded their share of the county project, \$95. Here again a new baby was remembered by a coin shower.

Rouville: Abbotsford reports a satisfying increase in membership this past year and a Blue Cross group has been formed.

Shefford: Three annual meetings here. Granby Hill celebrated their 23rd. birthday on Mar. 5 when their annual was held and are starting the next year with 17 members on the roll. A hot dinner furnished by the members was served at noon and tickets were sold on 2 quilts. \$5 was given the Red Cross. South Roxton most regretfully reports the loss of one of their charter members, Mrs. H. Doe, who passed away at the age of 81 years. \$3 was voted the Red Cross and here is a seasonable touch, sugar on snow was served at the close of the meeting. Warden voted money to the Red Cross and a silver mug was presented to the new baby of one of the members.

Sherbrooke: More annual reports. Ascot donated \$10 to the Red Cross and renewed a membership in the U.N.S. Four new members joined. Brompton Road also donated \$10 to the Red Cross. Cherry River had two readings, "A New Institute Member" and a humorous one "Teaching a Calf to drink". Lennoxville mentions this was their 31st. annual meeting. Another box of clothing is being forwarded to the Unitarian Service Commission. And here is an interesting note, a letter was received from a lady in Swan River, Man. asking for information about Lennoxville. She had heard of

this town through the W.I. broadcast from Sherbrooke. Milby held a novelty sale netting \$1.10 and voted \$5 to the Red Cross. This branch raised the \$500 necessary to furnish a room in the new Sherbrooke Hospital, a splendid achievement for one branch. Orford held a short memorial service for a beloved member. The poem, "She is not dead — she is just away", by James Whitcomb Riley, was read.

Stanstead: All branches held their annual meetings. Ayer's Cliff; their new president will be a familiar name to all Institute members, Miss Maud Kezar. Beebe cleared \$32 at two card parties. Dixville now has 25 members. A social evening of cribbage and 500 is planned. Hatley, another successful card party is reported. A presentation was made their retiring president. Minton discussed plans for an exhibit at the county fair. North Hatley reports only the usual routine business connected with an annual meeting.

Stanstead North has formed a Blue Cross group. Tomifobia sent another box of clothing to "Save the Children". Way's Mills is planning a waste paper drive to augment funds. An interesting letter of thanks was read from their adopted child in France.

Vaudreuil: Cavagnal commemorated their 21st. anniversary at the annual meeting. A life membership was presented to Mrs. T. Robinson, who was one of their first officers. \$10 was given the Red Cross and a card party realized \$51, which was used to buy dishes and cutlery for the Hudson Consolidated School. This branch is sponsoring a worthwhile project, a class in Needlecraft. This is under the direction of a local graduate of Macdonald College.

Danger Ahead for Cooperatives

Most co-operatives have had highly successful operations during the past six years — so have most other businesses. The real test lies ahead.

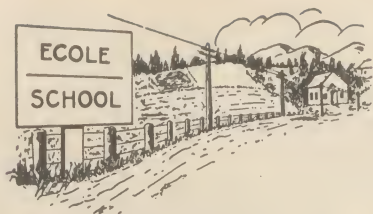
Losses from uncollective accounts receivable and losses from obsolete and over-priced inventories will spell the doom for many businesses in the next few years.

The question is, Will your co-operative be one of those condemned to a receivable-inventory death?

The time to answer the question is NOW or better yet, have answered it yesterday and the days before.

WARNING: Collect your receivables, get on a cash basis, get rid of obsoletes and "ersatz" inventories, keep good merchandise inventories to a workable minimum and watch your future commitments.

—MURRAY D. LINCOLN, *General Manager, Farm Bureau Co-operative, Columbus, Ohio, and President, Co-operative League of U.S.A.*



LIVING AND LEARNING



Short Course in Co-operation and Farm Bookkeeping

Few, probably, of the thirty-five farmers attending the weekend course in Lennoxville, April 18 and 19 realized before the close relationship that exists between co-operation and farm bookkeeping.

Dr. H. L. Patterson, an Economist from the Dominion Department of Agriculture, said a farmer must know what his income has been and what his expenditures were during the same period. He pointed out it is the ratio of these two factors that gives the end result or in other words a statement of earnings. Specialization in production has changed the self-sufficient farm to one relying on a host of outside influences. This has made it more necessary than ever for the modern farmer to know, through records, where his business stands at any time. Mr. Laberee, a practical farmer from Compton County further impressed these facts upon the participants by discussing with them the bookkeeping system he uses on his dairy farm. Efficiency was the key note, stressed by both these men. Good records, studied, and compared with other farm records can and will increase farm income.

While the economists were stressing efficiency on the farm, J. A. Pinsonneault, President of the Cooperative Fédérée and Mr. Houde of the same organization, were clearly indicating how the ratio of income to expense could be improved by using co-operative practices in buying and selling. Service at cost with complete

control by the members, makes the modern co-operative organization indispensable in any farming community. Mr. Pinsonneault said the Co-operative Fédérée is a central wholesale owned and controlled by four hundred fifty-six local co-operative organizations. It is their supply station. Through affiliations with Interprovincial and National Co-operatives, it becomes part owner of sources of supply, a further step to reducing costs to the farmer.

Mr. Houde, recently appointed to supervise co-operative income tax filing, reported on the most recent developments in this field. He carefully explained how a local co-op can best operate to avoid being unduly taxed. One of the essentials of efficient operation is a continuous program of co-operative education influencing more and more patrons to become members.

The success of this two-day course was due in no small way to the untiring efforts of Mr. MacDougall and Mr. MacMillan, Agronomists in Lennoxville. They were responsible for most of the detail arrangements. A luncheon held in the Scott Hall on Saturday drew a crowd of seventy-five people.

The Quebec Council of Farm Forums, sponsors of this course, would like to express their appreciation of the co-operation received from all those who so ably assisted and made possible a very successful course.

Farm Forum Day—June 21

Macdonald College will be a hive of activity on Saturday, June 21. Cars, buses, and train passengers will be pouring on to the campus from every direction. The annual meeting has become a Farm Day,—A day set aside when the College is host to five or six hundred Forum members and their neighbours,—A day set aside by farmers for a holiday in which they combine the business of their organization and the information offered by College departments.

Elaborate plans have been made to make this year's program successful. Starting in the morning at ten o'clock in the Assembly Hall, the Dean of Agriculture, Dr. W. H. Brittain, will deliver an address of welcome. Following this there will be executive

reports, discussions, resolutions and elections. Three hundred guests will be lunched in the main dining hall and the remainder will have a picnic lunch on the campus.

By popular demand this year's program will not include a guest speaker. Instead the afternoon will be devoted to tours, demonstrations, and displays. A special feature of the day will be a ceremony at 4 o'clock officially opening the new engineering building. This is a grand new structure, the first permanent addition to the College since 1905.

Farmers' Day at Mac is the high point of our Forum year. A special invitation is extended to everyone. Come, bring your neighbours, and enjoy it with us.

Blueprints for More Attractive Grounds

A contractor getting ready to build a house must first have the blueprints. These blueprints tell him how big the house is going to be. They tell him the shape of the house, the style, the number of rooms, the kind of construction, the number and size of windows and hundreds of other important details. When he starts out he knows where he is going.

It's just as important to have a "blueprint" of the plan for home grounds improvement. These landscaping plans should tell where the main lawn divisions are going to be, their size, the kind of trees to be planted, as well as the number and kind of shrubs and vines to order. The home grounds blueprint also should show where the fences, gates, sidewalks and other structures should be located.

While more and more farm families have indicated desire to improve the landscaping plan of their farm homes, the work often is delayed because no one knows just where to start. The obvious place to start is with the present layout. And the first step is to draw an accurate map of the entire area to be improved.

This map should be drawn to scale. It should show the over-all width and length of the area and the general slope. The location and first floor outlines of all buildings should be shown, and present plantings and structures, such as walks and gates, should be indicated. It is important that utility poles and wires, underground drains and outstanding views be shown.

With this base map as the starting point, the entire family should get together and put down all the improvements that they would like to see made. Top consideration should be given the personal needs and desires of all members of the family.

Once these desired improvements are listed, a start can be made to sketch them in on transparent paper over the base map. This is a trial and error process, but it can be an enjoyable hobby if the whole family takes part. It may take dozens of sketches before a final plan starts to take shape.

As work is started on the plan, though, there is need to get as much information together as possible on the various kinds and shapes of trees, shrubs and vines. Different plants can be used for different purposes. Plantings about the foundation of houses should be so selected that they will be the right height and shape when fully grown without needing to be heavily pruned. A variety of plantings is suggested. Usually, the highest plants should be placed out from the corner with lower plants under windows. Houses which sit

close to the ground, with little or no foundation showing, need very little, if any, foundation planting. Those having 2 to 3 feet of foundation showing need higher, heavier and more planting.



Joseph Galway, popular Secretary of Quebec Farm Forums, has been appointed National Farm Forum Secretary. His many friends in Quebec will wish him well as he takes over his new duties in Toronto on August 1st.

Correction

To An Article in the March Issue re the Use of Radio License Fees

Radio license fees (\$2.50) are collected by the Department of Transport, Radio Division, and are paid over to the CBC, under the terms of the Canadian Broadcasting Act, after the costs of collection and administration have been deducted.

This money, and revenue derived from commercially sponsored broadcasts, is used to carry on the work of the Corporation — programs, engineering, network lines, administration, press and information service, commercial operations, etc.

Of the total CBC income, about 70 percent is from license fees and 30 percent from commercial revenue.

The CBC International Service, however, is operated by the Corporation for the Government of Canada on separate grant for this purpose. It is not a charge against the money received for license fees.

Studios and program offices of the CBC International Service are in Montreal and the transmitters are in Sackville, N.B.

Interested readers may secure further information by writing to Mr. Wells Ritchie, Supervisor of Press and Information Service, 354 Jarvis Street, Toronto, Ont.



CO-OPERATION AND MARKETING

A page of interest to members of farmer's co-operatives

Canadian Co-operative Congress

by Joseph Galway

"Tomorrow's Peace in Today's Planning" was the theme for the second annual congress of the Co-operative Union of Canada. The three days were packed with reports, discussion and planning for better co-operatives and a better world of tomorrow.

Staples' Keynote

R. S. Staples in his Presidential address struck the key note for the conference when he said "Through co-operation powerful institutions can be built — institutions with efficient personnel and strong buildings and adequate bank accounts. Through co-operation we can establish a whole network of related and interlocking services. But co-operatives can do all that and still fail to accomplish their highest purpose. That purpose must surely be to develop people, to release the potential for good that lies in the human heart, to lead people on, to build them up, to make them see." In a similar vein, later in his address. Mr. Staples said "Some people think that a co-operative is just another way to make money. I want to say as solemnly as I can, that type of thinking can destroy the soul of this movement. If we spread the idea that we are interested only in financial success the greatest hope of humanity has gone by the board."

Visitors and friends of the Co-operative movement were present at the congress from Britain, the United States, and Newfoundland. In addition many people other than delegates were present from each of the provinces of Canada.

A. B. MacDonald Reports

These people received a first-hand account of Co-op Union development from the General Secretary's report. Mr. A. B. MacDonald reviewed events that have taken place since the Union was reorganized fifteen months ago. He said "This period has been marked by steady growth, co-ordination of efforts towards common aims, and a healthy flowering of a national outlook in the whole co-operative movement." Mr. MacDonald reported Provincial Unions in every province except Alberta and Quebec, and indicated new developments were taking place in these two provinces also. In the wider field the Co-operative Union of Canada took its

place last summer for the first time by sending a delegate to the International Co-operative Alliance Congress held in Zurich, Switzerland. Mr. MacDonald reported that one of the most significant things to be accomplished at that Congress was the setting up of the International Petroleum Association. There is no doubt but this will be a powerful factor in the mad race for oil supplies.

A long list of projects for the future was suggested by the Secretary, in such fields as Health, Insurance, Housing, and Finance.

He finished his report by saying "I am confident that the vision of a democratic and just economy for all Canadians will inspire our co-operative leaders at every level and urge them on to the performance of these tasks."

Of the many resolutions presented and passed, the most important concerned the taxation of co-operatives. While it is not possible to elaborate on the details in this short article the substance of the resolution was a request to the Dominion government to recognize the fundamental difference between a co-operative and a private corporation. As the law stands now, they are considered similar for taxation purposes.

Mr. Keen, who served as General Secretary, for thirty-six years, received the tribute of the entire Canadian Co-operative movement. He was presented with an oil painting of himself and a substantial purse of money.

Jerry Voorhis, newly elected Executive Secretary of the Co-operative League of the U.S.A., gave an inspiring address in which he said "There must be a movement that can teach men to act according to such principles as will benefit not themselves alone, not their own group alone not their own nations alone, but the whole world. There is such a movement—it is the Co-operative movement, and the institutions of tomorrow are our co-operatives — every last humble one of them, of every sort and description." His concluding remarks were "Our task is to build the fundamental substance of peace by developing co-operative relationships between peoples of all lands, but we shall only accomplish this if we enlist our next door neighbours in helping us to do it."

Strippings

by Gordon W. Geddes

Due to the fact that the only cutter in the vicinity suitable for making grass silage has been disposed of, we shall have to buy one of our own, if possible. We have not enough work to warrant such an investment but results with the silage do not encourage us to go back to raising corn. There is a lot of labour involved in corn with the plowing and planting and cultivating while a field left in hay for the year requires only the work of harvesting. Then, too, one must have some kind of cutter to get the corn into the silo and a custom machine usually comes after the crop is frozen. But the big drawback to corn is the soil erosion it leads to in our sloping fields. Many a year has seen a crop start only to be washed out by a big rain. Then we would spent a lot of time planting it in and still have a poor crop plus the damage to succeeding crops.

So, though we had hoped to wait until the boom prices were over before making any purchase of expensive equipment, we will probably make the plunge. Perhaps there will be some outside work done with the machine to reduce the cost. Then, too, there is the possibility that it may prove useful in threshing as well. We never have room in the barn for the grain and it is hard to get an outfit to thresh from the field. However, our neighbour has a small one if we had the cutter to set up behind it and blow the straw into the barn. This could save a good deal of time and the straw would be more useful.

Another discouraging feature for financing such a purchase just now is the fact that we lost one of our R.O.P. heifers this spring. We did not have many to sell this year as we were just getting the effect of not raising many heifer calves a couple of years ago. But we had hoped that the R.O.P. work would raise the value of what we had enough to cover the fewer number. However, we raised

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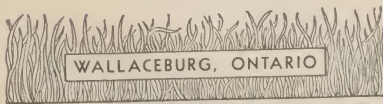
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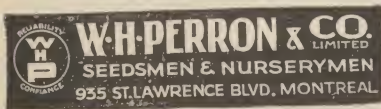


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the value of that one only for the purpose of increasing our loss. Of course, we did learn something from the loss as one often does, even though it is usually expensive information. In case it might save someone else from paying the tuition fee we did, here it is. Don't let the 'vet' treat a cow for milk fever without taking her temperature. If she has milk fever it will be below normal. Otherwise look for something else wrong. It is too simple an operation to neglect when it may mean the life of a good cow.

Our cows are disappointing us with bull calves this spring so we are apt to be short of saleable stock again in a couple of years. However, there are quite a few to freshen yet so that fault may be corrected, and, of course in a couple of years they may not be worth what it cost to raise them.

Our bluebirds were almost a month behind last year in getting back this spring. If they are good weather prophets, it will be a late spring. But of course they may just have learned better last year as they had some very unpleasant times after they got back. Certainly, it is much better to have frosty nights in April when they can help the sugar season rather than in May when they damage crops as they did two years ago. The sugar season begins to look as if it might be like last year. It started early but held on well though it is going to be even later this year. It will have to be if we make as much as last spring. It was over by this time last year, and we still have quite a bit to make to equal the crop.

Sugaring hung on late enough to prevent us from attending the Short Course at Lennoxville. Farm book-keeping has never received the attention it deserved and is becoming steadily more important. Facts and figures to prove production costs of farm goods and actual farm incomes would help immensely to get the prices to which we are entitled.

After last year's experience with our seed oats we tested them this



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year to be safe and the germination was 99%, so that should be good enough. But there was some wild mustard in it even after it was cleaned. It would be nice to have an outfit for spraying the grain fields to get rid of that. It could also be used for orchards and potatoes and perhaps even for paint jobs. Our Forum would like to see a spray outfit in the district but it is too big a proposition for us alone. However, some others might join us to whittle the cost down to our size.

Trough May Spread Disease

A common watering trough is just not good enough for dairy cattle. Unless every animal is healthy, the common watering place serves as a breeding place for tuberculosis.

This reminder comes from Canada's acting Veterinary Director General, Dr. Thomas Childs. He says that when testing a herd he has often found one or two animals badly infected and, next to them on the milking line, several reactions. If these re-actors had been bred and raised on their owner's farms, the veterinarian concluded that it was there they had been infected. The spread of the infection he attributes to the common trough.

Nor is tuberculosis the only disease which cattle may acquire in this fashion. Actinomycosis, or lump jaw, may be spread when discharges from its ulcers fall into the trough from which all members of the herd drink.

To prevent infection of these dangerous, expensive and sometimes fatal diseases, Dr. Childs recommends individual drinking bowls. More and more farmers are installing these.

Not as satisfactory but less expensive is a metal or wooden pail for each cow. These should be of heavy construction, as cows have the habit of pushing them around. And as a cow can kick over her drinking pail almost as easily as kicking over her milk pail, the buckets should be strong enough to stand a certain amount of this violence.

Despite its limitation, even an individual bucket is better than a common watering trough, but individual drinking bowls are best.

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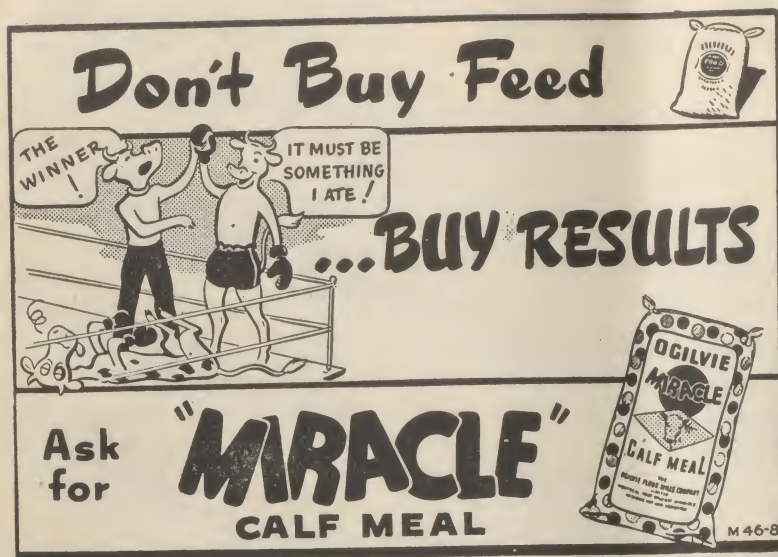
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Barley Takes Over as Hog Feed

by T. J. Harrison

Canadian hogs were fed almost four times as much barley in 1943 as they got in 1933. By 1945 our total barley production, except for 12,000,000 bushels used by maltsters and millers, went into feed, so that we had none left for export. T. J. Harrison, chairman of the National Barley and Linseed Flax Committee, gives much of the credit for this increased use of barley as hog feed to some feeding tests conducted at Macdonald College.

In the thirties, Western Canadian barley growers had a hard time finding markets for their barley. Possible markets at home and abroad were investigated, and it was found that Eastern hog feeders were using large amounts of imported corn and home-grown oats.

Many livestock men believed that barley at the prevailing prices was not only a cheaper feed, but would produce better bacon. However, there was no definite information to back up these opinions. So the National Barley and Linseed Flax Committee decided that the feeding value of barley should be thoroughly investigated.

The natural place to carry on such

work was in the Eastern hog-feeding area. Macdonald College, being an endowed institution, was considered most suitable for conducting the investigation. And because Professor E. W. Crampton was an outstanding animal nutritionist, he was considered the ideal man to supervise the project.

The problem of financing then arose. Professor Crampton, through Macdonald College, agreed to supply the hogs and do the work, if the Committee would arrange for the feed. The Western Grain Pools were approached with a request that they supply the barley. At this time the Pools had an office in Eastern Canada, endeavouring to sell Western feed grain on this market. They agreed to supply Professor Crampton with the feed free of charge. Professor Crampton arranged with the packers in Montreal to slaughter the hogs and allow him, along with their bacon experts, to examine each individual carcass.

The first job was to determine the relative values of barley, corn and oats as the basic feed for fattening hogs. Western barley not only proved the

cheapest feed but produced a much better type of bacon.

The results of the feeding test and carcass examination were reported to the Committee and were published in *Scientific Agriculture*. A popular outline of the experiment and results was published by the Dominion Department of Agriculture for general distribution amongst the hog feeders. Since the original test was completed, other phases of the problem have been attacked, such as: finding the value of barley as a supplement with other grains such as feed wheat, the best amount to feed at different times during the fattening period, and variations in feeding requirements between barrows and gilts. In all of these tests, barley has proven the best basic feed.

Largely as a result of these tests and the publicity given to them, says Mr. Harrison, barley is now recognized nationally as the Canadian hog feed. In 1943, the Bureau of Statistics reported 183,706,145 bushels used for animal feed in Canada. The committee estimates that in 1933, just before this programme started, less than 50,000,000 bushels was used for feed. In other words, the use of barley as animal feed (largely hog feed) had increased approximately 400 percent.

Injuries Invite Mastitis

New cases of mastitis occur most frequently among animals receiving teat or udder injuries, it has been shown at the Pennsylvania Agricultural Experiment Station. Diseases that lower general resistance also pave the way for mastitis infection, and drafty stalls invite it.

Putting Farm Ponds to Work

Farm ponds are good for more than swimming. Some farmers use them to supply water for livestock, fire control, irrigation, spraying, boating and landscape beautification, as well as fish growing.

Poultry Questions Answered

by W. A. Maw

Q.—What precautions should be taken to avoid fire in brooder houses?

A.—Brooder house fires are usually the result of neglect of proper precautions. Hot coals dropped when shaking a coal stove or explosion in an oil stove due to overheating are the common causes of fire. First, the floor of the brooder house, in the area about the stove, should be covered with a metal sheet covered with sand. Litter should be cleared back from the stove when shaking the stove. Be especially careful to avoid hot coals getting under the stove, if they fall to the floor.

Take care in handling the oil brooder to keep anything from getting into the oil supply, which later may block the oil feed line which is controlled by an automatic flow according to the need of the burner to maintain the necessary temperature. It is advisable to strain the oil when pouring into the supply tank.

Operate the stove strictly according to the manufacturer's instructions.

Q.—What is a satisfactory chick litter?

A.—Planer shavings, peat moss, rice hulls, oat hulls, cut straw or clean hay chaff all make satisfactory brooder house litters. Sufficient litter should be used to keep the floor warm and dry. Mixed litters, such as planer shavings and rice hulls, or cut straw and shavings, or peat moss and shavings, are satisfactory for brooder houses. Dry coarse sawdust may also be used in a mixed litter to advantage. Sand is also satisfactory.

Q.—What simple method can be used to keep chicks close to the brooder during the first few days?

A.—A common practice is to use hinged boards, 10 to 12 inches in height, standing on edge to form a circle just outside the edge of the canopy over the stove. A similar fence of wire netting, galvanized iron sheeting or corrugated cardboard may be used. The hinged boards make an excellent arrangement, since they can be lifted and folded flat for standing against a wall out of the way. The boards can be moved out with ease to enlarge the circle.

Q.—How soon can turkey poults be fed fresh green feed?

A.—Turkey poults are fond of green feed, such as clipped grass, clover, onion tops or other vegetable tops. Such green feed may be fed after the poults are a week old. The usual starting mash contains dehydrated alfalfa or cereal grass, but the extra fresh green forage is relished by the poults.

Q.—What are turkey saddles?

A.—Saddles are made of a canvas-like fabric which

has two rib-like seams running lengthwise, making a three-piece arrangement over the back of the hen. The seams give the tom an opportunity to have a toe grip, which will avoid the foot slipping off the side of the body. The saddle is used to prevent the toms tearing the body skin on the female when the foot slips over the side. A loop is located at each side at the front of the saddle to go around each wing.

Q.—Should turkeys be tested for pullorum disease?

A.—Turkeys are subject to pullorum disease and therefore should be blood-tested to have the best breeding and rearing results. The testing is done with the same antigen as used with chickens. All breeding stock coming under breeding policies must be tested before being approved for poult production.

Q.—Can turkey poults be started in battery brooders?

A.—Poults may be successfully started in battery brooders. The usual practice is to brood for three or four weeks, after which the poults are placed on the floor with a brooder stove supplying heat up to seven or eight weeks, depending upon the season. Wire floors are commonly used with floor brooding. Sun porches are used after three weeks of age to give the birds access to outdoor sunshine and cooler temperatures.

Q.—How many eggs will turkey hens of different ages lay during the spring breeding season?

A.—Egg production from turkey hens of different ages varies with their breeding, since some strains have been progeny-tested and bred for increased egg production. The average hen will lay approximately 50 eggs in the first year. Each succeeding year will show less production; the second, about 36 eggs; the third, 29 eggs; the fourth, 24 eggs, and the fifth year, 14 eggs. It does not pay to carry adult hens for breeders, unless they are of particular family breeding.

Q.—What are the general symptoms of Pullorum disease in young chicks?

A.—Early deaths in chicks affected by Pullorum may not show any definite postmortem effects in the organs. Unabsorbed yolk sacs during the first three or four days are not necessarily indicative of the disease, but if the condition is noted at a later age the disease may be suspected. Where chicks show evidence of diarrhea, are not feeding and appear weak, then such conditions may be suspicious. Such chicks may show dark red streaky livers and inflammation of the heart sac. Where disease is suspected, it is advisable to have a proper postmortem examination and blood serum check made by a qualified poultry pathologist.



THE COLLEGE PAGE

The Macdonald Clan

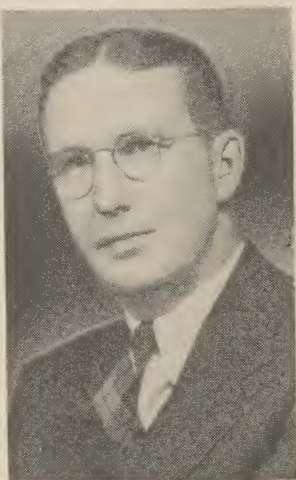
Notes and news of staff members and former students

Two Professors Appointed in Economics

Dr. David MacFarlane and Dr. Gordon L. Burton have been appointed Professors of Agricultural Economics at Macdonald College, and both appointments will take effect on September 1st, 1947.

For years all the courses in Agricultural Economics at the College have been taught by Dr. J. E. Lattimer, who has been at one and the same time Chairman and staff of his department. This "one man department" has done yeoman service, teaching elementary economics to degree and diploma students, and giving advanced courses to third and fourth year students in various options.

Dr. David L. MacFarlane is a native of Saskatchewan, holds the B.S.A. and M.Sc. degrees from the University of Saskatchewan, and has his Ph. D. from Harvard. Following his graduation from Saskatchewan he worked for a time in their Farm Management Department, then was for two years research assistant at the University of Minnesota. He also spent a session at the University of Manitoba as Lecturer in Political Economy.



After obtaining his Doctorate at Harvard he took a position at the University of Kentucky, but came back to Canada in 1942 to engage in war work. Early in 1943 he was named Assistant to the Economic Adviser in the Foods Administration of the WPTB, and was released from that position in August 1944 to take a position with UNRRA at Washington.



Dr. Gordon L. Burton was raised on a cattle ranch in Alberta. He holds the M.A. degree from the University of Alberta, and did research for his Doctorate at Iowa State College and the University of Chicago, receiving his degree from the latter institution. Following graduation from Alberta he was employed by the Economics Division of the Dominion Department of Agriculture doing land utilization and

farm management work in Saskatchewan, Alberta and British Columbia, and subsequently was in the employ of the Dominion Bureau of Statistics, preparing estimates of net farm income for Canada, and later working on index of prices received by farmers. For some time he was in charge of crops estimates and edited the Wheat Review and the Coarse Grains Review.

The simultaneous creation of two chairs in the same department is something of a novelty, and this action on the part of the authorities shows the importance which is attached to the teaching of Economics within the University. The new appointments will make it possible to increase the usefulness of the Faculty of Agriculture in a field in which heretofore its contributions have been restricted due to a lack of staff, and, since the new professors will take part in the training of Arts and Commerce students, the whole programme of Economics teaching within the University will be strengthened. As a result of this new plan, the work of the departments at Macdonald and at McGill will be fully co-ordinated and they will no longer work in isolation.

Fight Dutch Elm Disease

DDT sprays offer the most promising means of protection against Dutch elm disease, entomologists of the U.S. Department of Agriculture announce as the result of tests last year. These tests, says the Bureau of Entomology and Plant Quarantine, indicate that living and healthy elm trees can be protected from infection by two sprayings each season, the first with 2% DDT spray followed by a one percent spray approximately 75 days later. By using an oil DDT spray, dead and dying elms can be rendered relatively harmless as sources of infection.

The entomologists have not yet had time to work out the best and most economical schedules for spraying. Equipment for spraying large elms will be too expensive for individual ownership in most cases, the entomologists believe. But communities that value their elms and are willing to finance community spraying campaigns can now have more assurance than ever before of practical protection at moderate cost.

The U.S. Department of Agriculture also reports that an elm resistant to the Dutch elm disease looks promising for growing in at least some of the localities where the American elm is in great danger of destruction. Resistant trees, of a European variety called Christine Buisman, were brought from England in 1939 by the Department of Agriculture and a number of them planted at Morristown, N.J., and Glenn Dale, Md.

Those planted at Morristown, which is in the midst of one of the areas longest infected with the disease, were inoculated with the fungus as soon as they became well established. During the six years they have proved remarkably resistant, according to pathologists of the Bureau of Plant Industry, Soils, and Agricultural Engineering. Only a few inner leaves have ever wilted or yellowed.

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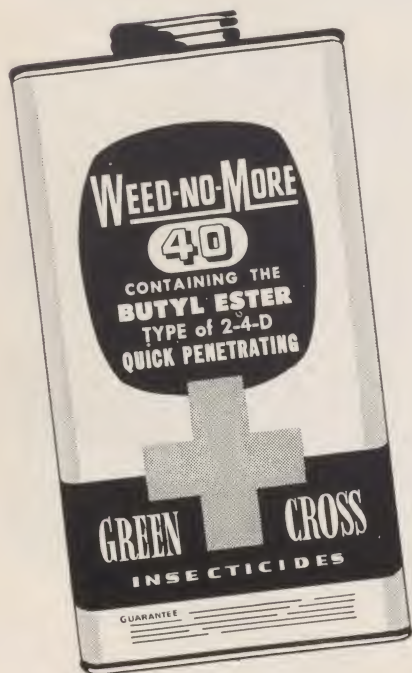
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WARNING: While harmless to grain or grass, 2, 4-D will kill many broad-leaved plants or trees as well as weeds. Care should be taken, especially on windy days, to avoid letting the spray reach fields with susceptible crops, trees, clover, hedges, etc. Wash out sprayer as directed on can before using for any other type of work.

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